16TH GNLU INTERNATIONAL MOOT COURT COMPETITION, 2025

INDUSTRIA — OMNIBUS POLLINATOR PROTECTION REGULATION

24-28 SEPTEMBER, 2025

A. INTRODUCTION

1. **Respondent:** Industria, a WTO Member, is a high-income country with a Gross National Income (***"GNI"***) per capita of USD 18,985. Industria's total land area is 0.5 million square kilometers, of which 35% is cropland, while another 17% consists of primary and other forests, forming part of the Avalon rainforest. The Avalon rainforest is the largest in the world, home to a wide variety of agricultural products, including vanilla, citron, and rose hips, and supports many animals, including important pollinators. Industria hosts around 1,400 bee and 300 butterfly species - one of the most diverse pollinator populations in the world. The total pollinator population in Industria is estimated to be 5% of the global pollinator population. Between 2000 and 2024, Industria's pollinator population experienced a decline of 9%. In the last four years, the decline was 10%, 12%, 7%, and 24% respectively compared to the previous year.

2. BioHarvest Solutions Inc. (***"BioHarvest"***) is Industria's only producer of pesticides[1] and benefited from early government programs for developing the pesticide industry. BioHarvest has two main products. BioPestNil is a Clothianidin (neonicotinoid-based) insecticide launched in 1999 following ten years of field trials, considering the latest developments in the scientific research community worldwide, and has been BioHarvest's best seller. The other product, BioPestFree, is BioHarvest's latest offering. BioPestFree is a Flupyradifurone-based insecticide, launched in 2018 following a similar procedure to BioPestNil. With constant innovations, Flupyradifurone-based insecticides from Industria have achieved lower Maximum Residue Limit (***"MRL"***) standards for a few agricultural products than those set under Industria's domestic regulations. BioPestFree hopes to become a game-changer in pollinator-safe innovations, leading to improved pollinator life and health. BioPestFree is commercially available in many countries, including Industria and Aspiria. Sales details of insecticides in the Industrian market, for domestic and imported insecticides, are provided in **Annex-B**. Details of Industria's market for Vanilla are provided in **Annex-C**.

[1] For greater certainty, "Pesticides" is any substance, or mixture of substances of chemical or biological ingredients intended for repelling, destroying or controlling any pest, or regulating plant growth, and include insecticides, fungicides, nematicides, and herbicides chemicals used in agriculture to increase production by combating organisms that damage or destroy plants.

3. **Complainant:** The Republic of Aspiria, also a WTO Member, is a developing country with a GNI per capita of USD 2,216. Aspiria and Industria share parts of the mighty Avalon rainforest. Aspiria is one of the largest and fastest growing economies in the world. Aspiria's total land area is 3.7 million square kilometers, of which 25% is forest cover, and around 55% is the total agricultural land area. The growing population and developmental needs led Aspiria to focus on ensuring a self-reliant agriculture sector and developing industries to sustain economic development. This led Aspiria to set up a large pesticide industry to increase agricultural output and eventually helped Aspiria to become the world's largest producer and exporter of citron, rose hips, and vanilla. At the same time, Aspiria's industrial policy led to a decline in Aspiria's total forest cover by 10% between 1980 and 2020, only to increase by 5% in the last four years.

4. AspiChem Private Ltd, established in 1995, has become Aspiria's biggest insecticide producer. Given Aspiria's less stringent pesticide regulations on product trials and testing, the company capitalised on lower R&D and compliance costs, thereby expanding its market to more than 60 countries, including Industria. Today, it claims to be the largest insecticide exporter in the world. AspiGrow (Imidacloprid, Neonicotinoid-based) and AspiPure (Flupyradifurone-based) are their largest-selling flagship insecticides. Refer to **Annex-B** for its export sales to Industria.

5. Neonicotinoids are a well-known insecticide and are classified under the Harmonized System (HS) code 3808. Neonicotinoids are known to disrupt or affect the nervous systems of insects and can be applied to seeds before planting or directly to the soil. Industria's Food Safety Authority (IFSA) has recently undertaken a risk assessment, concluding that residues of Neonicotinoids found in nectar and pollen of tested agricultural products pose a high risk to pollinators, mainly bees, causing adverse effects on pollinators' survival, reproduction, and foraging abilities. The study strongly recommends restricting the use of Neonicotinoids to protect pollinator populations (See **Annex-E)**.

6. Flupyradifurone is an insecticide that protects agricultural products from sap-feeding pests. It is also classified under HS code 3808. Compared to other insecticides, Flupyradifurone is considered to be more effective in controlling aphids and whiteflies, and Industria is now moving towards Flupyradifurone based insecticides. Existing studies are inconclusive in indicating whether

Flupyradifurone is likely to be carcinogenic to humans and harmful to non-target species. Regarding its impact on pollinators, limited studies suggest that Flupyradifurone is unlikely to affect bees' taste perception and learning ability when used below the approved concentration.

B. CURRENT STATE OF PLAY

7. Pollinators, such as bees, bumblebees, and butterflies, provide vital nutrients to crops, vegetables, and nuts, and are critical for their production. They support around three-fourths of agricultural products and help to improve yield and genetic diversity. Some studies estimate that they provide ecosystem services to around 85% of all cultivated agricultural products.

8. Not only are pollinators essential for food production, but their impact on trade cannot be brushed aside. The economic contribution of pollinators to agriculture is estimated to be between USD 224 billion and USD 577 billion per year globally.

9. Over the past few decades, the pollinator population has declined rapidly due to various factors including habitat destruction, the use of pesticides, and climate change. Approximately 25% fewer species were estimated to exist between 2006 and 2015 relative to the number of species counted before the 1990s. Another report indicates a 22% decline in butterflies in the United States between 2000 and 2020, while the United Kingdom reported its lowest bumblebee numbers in 2024, recording a 25% decline compared to the 2010-2023 average.

10. The World Economic Forum estimates that the world produces 3% to 5% less fruit, vegetables, and nuts than it could with a healthy wild pollinator population. The report, based on a study by Environmental Health Perspectives, is the first to quantify the effects of insufficient wild pollinators on human health. The study states that "Ensuring an abundance and diversity of pollinators is one effective approach to address the nutritional and environmental challenges facing global food systems." More importantly, the study estimates that around 26% of vegetable production in low-income countries and 8% of fruit production in middle-income countries were lost due to inadequate pollination. As a result, there were an estimated 4,27,000 extra deaths per year because people consume fewer healthy foods, increasing the risk of diseases like heart disease and stroke. In developed economies such as the United States, nut consumption lowered by 11-

12% due to pollination deficits. The study estimates an annual economic loss of USD 209 to USD 442 per farmer in selected low-income countries. The report concludes that there is an urgent need for policies that support pollinator populations, such as reducing insecticide use and preserving natural habitats. Addressing pollinator decline is not only important for biodiversity but also crucial for improving food security, public health, and economic stability.

11. In the 1980s, Industria was home to millions of slender-billed vultures. These birds played a critical role in eating the animal carcasses, thereby preventing the potential spread of diseases. However, in the early 1990s, the population of vultures declined rapidly, and by 2000, they were categorised as being near extinct. A thorough investigation into the dwindling population of these birds revealed minor traces of Diclofenac in cattle carcasses, which eventually resulted in the deaths of the vultures that consumed them. This event shook the conscience of Industria's citizens and led to the development of stringent regulations on the marketing of medicines and chemicals intended to protect plants, animals, and human life and health.

12. The recent decline in pollinators served as a grim reminder to the people of Industria about past vulture deaths. This issue was taken seriously during the recent election campaign by Industria's Eco Party. At the same time, Industria also prides itself on being the most ecologically sensitive nation. It aims to be the first country to completely stop the degradation of its natural ecosystem while promoting sustainable farming practices.

13. Following a successful campaign, the Eco Party was recently elected in February 2024. The party' s electoral agenda, among other things, vowed to introduce legislation to protect and promote environmental objectives while ensuring the sustainability of Industria's agriculture sector.

14. In her inauguration speech, Ms. (Dr.) Pinta Gonzalez, the elected leader of the Eco Party, reiterated her commitments and introduced a comprehensive Sustainable Biodiversity Package (***"Package"***) that will restore Industria's biodiversity by 2040. Ms. (Dr.) Pinta went on to say as follows (extracted part of the speech):

> *"Industrians have spoken loud and clear during this election, and our mandate is to achieve economic prosperity while preserving our environment. Our future lies in both sustainability and economic strength.*

…We face a new crisis as pollinators—bees, butterflies, and other vital species face extinction. Pollinators contribute at least Euro 25 billion to Industria's agricultural output each year, and their decline threatens our food system and human health. If the decline goes unchecked, the consequences will be dire, leading to rising food prices, lost jobs, a detrimental impact on human health, and a weakened economy.

The recent election showed that environmental protection is not just a cause but an economic and moral imperative. As environmental custodians, we will not let history repeat. Your voices have led to the creation of the ***Sustainable Biodiversity Package****, a bold plan to safeguard our ecosystems while promoting sustainable farming practices.*

This package is about balance and harmony between nature and industry, protection and progress. At the heart of this package is our commitment to lead global pollinator preservation efforts, while ensuring sustainable and fair practices to enable food security. We will promote ***biodiverse and sustainable farming****, which is more resilient to climate change, reduces reliance on chemical inputs, and spreads economic risks.*

We will continue to defend Industria's trade interests by promoting our safe, sustainable agricultural products and ensuring global recognition of our standards. Imported pesticides must meet the same safety benchmarks as domestic products, not to block trade, but to ensure a level playing field with strong health and environmental protections. By leading in sustainability, we create new trade opportunities, attract investment, and ensure that Industria remains competitive globally. The Package includes key initiatives that will set Industria apart as a global leader:

- ***The Nature Restoration Law****: This will restore degraded ecosystems by means of state incentives, better tracing mechanisms, and due-diligence requirements to ensure promotion and preservation of forest covers and vital animal species.*
- ***Omnibus Pollinator Protection Regulation (OPPR)****: Industria's world-class insecticide industry will inspire a global revolution through its cutting-edge technology that meets the highest safety standards, including MRL standards, packaging and labelling requirements. Our farmers will have access to effective, regulated, pollinator-friendly products that protect crops while ensuring food safety.*

We are not just reacting to crises, we are shaping the future to save the world. Our goal is clear: Industria will be the first nation to ***completely stop the degradation of its natural ecosystem****.*

This is not just Industria's vision; it is a promise that we will leave a stronger, healthier, more prosperous Industria for future generations.

Together, we can ensure that our natural heritage thrives, our economy prospers, and our nation remains a beacon of sustainability. To all of you who voted for change—to the farmers, the workers, the families who believe in a better future—this is our moment. Let us build it together to make Industria great again."

15. The OPPR seeks to protect the pollinator population and habitat by introducing a number of requirements, including prohibiting placing listed pesticides on the market of Industria. The relevant extract of the Regulation is provided in **Annex-A**.

16. Additionally, MRLs for the use of certain pesticides on specified agricultural products will be established. The IFSA evaluates insecticide risks based on health impact, dietary exposure, and environmental effects, resulting in stricter standards than global standards. These measures have been introduced as a precautionary measure to protect the pollinator population and are stated to be scientifically justified. The underlying scientific report issued by IFSA places all neonicotinoids into a single risk profile, based on tests carried out on a single type of agricultural products, while separately analysing Flupyradifurone. The scientific report relies on a combination of quantitative assessment, expert opinion, a general literature review in other countries, including Aspiria, and on a country-wide survey among the citizens of Industria. A summary of IFSA's assessment report is enclosed as **Annex-E**.

17. The pesticide-treated products can be placed on the market only after IFSA's approval, following the completion of prescribed tests and receipt of a dossier that includes an environmental impact assessment, toxicity studies, and the accredited agency's certification of the pesticide-treated products. Such requirements are mandatory for parties seeking to place pesticide-treated products on the market. Documentation and certification requirements are exempted for Small Size Farmers placing these products on the market.

18. Industria has also introduced a new packaging and labelling requirement as part of the OPPR that must be fulfilled for the agricultural products to be introduced in Industria for consumption, sale, or distribution. Industria considers the measure to be necessary for the protection of pollinators, promoting sustainable environment, enhancing and promoting consumer awareness and public health. The said labeling and packaging requirement will be in effect for 10 years from the date of entry into force of the OPPR. The agricultural products must be sealed in non-single-use packaging weighing either 100g, 200g, 500g, 1kg, 2kg, or 5kg, and must prominently display a "Happy Bee" label. "Happy Bee" is a new certification mark developed by IFSA to help consumers know about the compliance with pollinator-friendly practices.

C. STATE OF AFFAIRS IN ASPIRIA

19. Under the Aspiria Pesticides Act of 1970, Aspiria regulates the placing of pesticides within Aspiria. The said Act defines "placing on the market" to include the sale, manufacturing, distribution, and import of pesticides. Additionally, the Food Safety and Standards Authority of Aspiria (***"FSSAA"***) establishes, based on a risk assessment, MRLs of notified pesticides for various agricultural products.

20. To strengthen Aspiria's agriculture sector, the Minister of Agriculture and Environment, Hendra Kasim, has introduced a new Pesticide Management Bill in Parliament in August 2024. The Bill has been introduced at a time when regional elections in key agricultural states were approaching. The Bill seeks to balance agricultural productivity while strengthening environmental protection. Among other things, the Bill aims to regulate the manufacture, import, sale, storage, distribution, use, and disposal of pesticides to ensure the safety of humans, animals, or plant life or health. The Bill will introduce a Central Pesticides Board for scientific advice and streamline the registration and licensing for pesticide-related activities through a dedicated Registration Committee. The Committee will evaluate the safety and efficacy of pesticides. The government, through FSSAA, will have the authority to regulate prices and restrict the use of hazardous pesticides. Offences such as illegal manufacture, import, sale, storage, distribution, use, and disposal of pesticides will attract penalties, including imprisonment of up to three years or significant fines.

21. However, soon after the Bill was introduced in Aspiria, Industria published its draft OPPR in September 2024 and notified the final OPPR on Industria's government website as well as to the WTO in February 2025[2]. Specific OPPR provisions amendments have a significant impact on Aspirian farmers, as Aspiria's MRLs are generally higher than those in Industria due to Aspiria's agricultural and climatic conditions, as well as limited assessment studies. At the same time, prohibiting the use of neonicotinoids in Industria has severely affected Aspiria's exports of said pesticides.

22. Following the introduction of the OPPR, a major farmers' strike erupted in Aspiria, and a sharp decline in exports of its key agricultural products was reported. Aspirian farmers sent a written representation to the government, contending that Aspirian exporters are already experiencing increased rejection rates and higher testing costs in Q4 of 2024, which are reducing their competitiveness in Industria's market. Aspirian farmers further allege that the OPPR favours highly advanced industries and is meant to safeguard Industrian farmers. Finally, it is contended that Industria revises MRLs without adequately considering the scientific data and not providing adequate opportunities for stakeholders to share their views, leading to regulatory uncertainty.

23. Aspiria's farmers argue that Industria is also the biggest export market for citrus fruit and rose hips. These products contain neonicotinoids, and Aspiria claims that their risk assessment methods have proven that neonicotinoids are not harmful. Aspiria's farmers further argue that Industria's complete ban on neonicotinoids-based pesticides is premature and unjustified, given the existence of naturally occurring neonicotinoids in certain agricultural products. They claim there exists no definitive study examining the effects of naturally occurring neonicotinoids[3] and neonicotinoid-based pesticides on the pollinators, when applied on citrus fruits, rose hips, or vanilla. Additionally, many Aspirian trade lawyers and policymakers viewed that the conditions in Least Developed Countries (***"LDCs"***) with equivalent regulatory environment, Industria, and Aspiria are broadly similar, casting doubt on Industria's true intent behind the OPPR. Given the comparable level of increasing disease risk across regions, they question whether the regulation

[2] Date of adoption and the date of entry into force of OPPR is 14 February 2025.

[3] For greater certainty, the effects of naturally occurring neonicotinoids are the same of those artificially added.

aims to protect human, animal, and plant life. They further contend that the varying levels of sanitary protection, particularly the differences in MRL values, are arbitrary and not comparable. Such a measure was not scientifically justified, and the reason for the prohibition of neonicotinoids was unknown.

24. By restricting the imports of Flupyradifurone based products despite the scientific uncertainty, farmers believe that Industria is enforcing a regulation that may wrongfully penalise them for residues that could be naturally occurring rather than resulting from insecticide use. They also point out that the IFSA had previously indicated it would consider additional scientific data if submitted by 22 February 2030, yet the sudden ban disregards this commitment. As a result, Aspirian farmers now face trade restrictions, economic losses, and compliance challenges, all stemming from what they see as an arbitrary and protectionist regulatory decision. They argue that without definitive scientific proof, the restriction disrupts agricultural trade and sets a dangerous precedent for future regulations that might lack a solid scientific foundation.

25. Aspiria did not initially raise a specific trade concern when Industria issued the draft OPPR for stakeholder consultations. However, when the final OPPR was notified to the SPS and TBT Committees, Aspiria raised a specific trade concern at the WTO SPS Committee meeting in March 2025, advocating for science-based and transparent decision-making. An extract of the SPS Committee meeting minutes is enclosed in **Annex D**.

26. Aspiria contests that a proper risk assessment was not conducted and that Industria has failed to adequately justify the ban on neonicotinoids. With respect to higher MRL thresholds for Flupyradifurone, Aspiria contests that the causal link to public health has not been properly established, relying on grounds of scientific uncertainty, which renders the measure arbitrary and unreasonable. Furthermore, Aspiria asserts that the OPPR was introduced not for genuine human and pollinator health concerns, because the regulation is applied in a more restrictive manner than necessary and favours certain countries over others.

27. Aspiria further argues that the labeling and packaging requirements alter the conditions of competition to the detriment of imported products by requiring foreign producers to restructure their packaging and production lines. Aspiria contends that complying with the labelling and

packaging requirements in the coming years will be difficult for them, as the new labelling and packaging requirements will only increase the cost of compliance.

28. Aspirian farmers apply Neonicotinoids and Flupyradifurone interchangeably and consider them as substitutes. Since Aspirian farmers are facing a significant decline in exports of neonicotinoid-based products, including citron and rose hips, Aspiria claims that the OPPR results in both *de jure* and *de facto* discrimination against Aspirian products.

29. Aspiria argues that Industria's explanations in the SPS and TBT Committees were neither satisfactory nor complete. Moreover, it has expressed deep concern over the sudden reduction in MRL without prior announcements or discussions, describing it as highly discouraging.

30. Aspiria requested consultations with Industria at the end of March 2025, which were unsuccessful. Consequently, on 9 July 2025, Aspiria submitted a request to establish a panel to the Dispute Settlement Body (***"DSB"***) pursuant to Articles 4.7 and 6 of the Dispute Settlement Understanding (***"DSU"***), Article 11 of the Agreement on the Application of Sanitary and Phytosanitary Measures (***"SPS Agreement"***) and Article 14 of the Agreement on Technical Barriers to Trade (***"TBT Agreement"***). The request for the establishment of a panel contained the following claims:

A. IFSA's methods and placing reliance on non-peer-reviewed studies and a general public survey lacks scientific rigor and fail to meet the requirements of 5.1, and that the measure is arbitrary or unjustifiable in the levels it considers to be appropriate in different situations henceforth is inconsistent with Articles 5.5 and 5.6 of the SPS Agreement.

B. The OPPR in its entirety is trade restrictive in nature and is violating Article XI:1 of the General Agreement on Tariffs and Trade 1994 (GATT 1994).

C. The "Happy Bee" and the packaging requirement by Industria through OPPR is violative of Articles 2.1 and 2.2 of the TBT Agreement.

31. Industria rejects all the claims made by Aspiria. Industria justifies its measure on the basis of its risk evaluation of pesticides as well as on the grounds of scientific uncertainty around Flupyradifurone, ensuring consumer health and safety, promoting sustainable agriculture,

facilitating market transparency and streamlining domestic priorities of sustainable farming, protecting biodiversity, preserving pollinator population, preserving soil health, enhancing product traceability and raising consumer awareness. Industria further defends the pesticides prohibition and MRL requirements under the WTO SPS Agreement, arguing that its MRLs are non-discriminatory, scientifically justified, and necessary to safeguard public health. Additionally, Industria defends its OPPR under Article XX of the GATT 1994 and Article 2.2 of the SPS Agreement as well. Industria also mentioned that it could not achieve their goals if the MRLs of the Codex were followed. Industria mentioned that their OPPR did distinguish between countries that were granted exemptions from certain MRL requirements such as those with equivalent regulatory environment, and those that did not. However, Industria claims that this was a justified distinction in light of the Industria's chosen level of protection for human and plant, health and safety, and hence the chosen precautionary measure. Industria rejects the claim that its measures constituted a quantitative restriction on trade. As regards the labelling and packaging requirements, Industria considers that the objective is in line with WTO Members' right to determine their desired level of protection, and that the packaging requirement contributes to traceability and contamination control, which improves food safety and human health. According to Industria, labelling has a positive correlation with consumer awareness on reducing harmful agricultural practices and promotion of sustainable practices.

NOTE FOR PARTICIPANTS:

For scientific evidence, the participants may rely upon **Annex E** and shall not introduce any new evidence. They may, however, refer to illustrative reference materials for gaining a better understanding of risk assessment studies.

ANNEX A: OMNIBUS POLLINATOR PROTECTION REGULATION (EXTRACT)

Article 1: Object and Purpose:

(a) The Regulation lays down harmonised rules for the protection of pollinators and preservation of global pollinator habitats, for the authorisation of pesticides in commercial form and for their placing on the market within the territory of Industria, with the aim of securing Industria's ecosystem, safeguarding Industria's agricultural output, and protecting human or animal or plant life or health.

(b) The Regulation promotes safe and sustainable farming practices while ensuring consumer awareness and streamlining processes.

(c) The provisions of this Regulation are based on the precautionary principle to ensure that active substances and products do not harm human or animal or plant life or health.

Article 2: Scope

This Regulation applies to pesticides consisting of or containing active substances, safeners, or synergists used to protect pollinator-attracting plants, influence plant growth, preserve plant products, destroy undesired plants, or control their growth. It also applies to active substances, safeners, synergists, co-formulants, natural and artificial and adjuvants used in or with such pesticides.

Article 3: Authorisation

(a) Pesticides, and products in which the pesticides mentioned in **Appendix I** are used shall not be placed on the market[4] unless it has been authorised in accordance with this Regulation.

(b) By way of derogation from paragraph (a), no authorisation shall be required for placing on the market and use of pesticides for (i) research or development purposes; (ii) imports from any country of origin that maintains a regulatory environment substantially similar in scope to the

[4] For the purposes of this Regulation "placement in Industria's market" shall include use, sale and distribution of covered products in Industria.

regulatory framework of Industria, or where risk assessments or scientific standards recognised by Industria; and (iii) Small Size Farmers.[5]

Article 4: Maximum Residue Limits

(a) Products treated with pesticides shall not be placed on the market in Industria, except where:

(i) they meet the Maximum Residue Limit prescribed under **Appendix II**.

(ii) IFSA approval is obtained following the completion of official test and upon receipt of a dossier that includes an environmental impact assessment, toxicity studies, and an accredited agency's certification of the pesticide-treated products.

(iii) originate from farms owned by Small Size Farmers.

(b) For the purposes of this Article, IFSA shall set MRLs based on recommendations made in periodic impact assessment studies conducted on pesticides applied to agricultural products.

Article 5: Labelling and Packaging Requirements

Label: All products treated with listed pesticides must carry a clearly visible "Happy Bee" label certifying that the product complies with the OPPR sustainability standards, promoting pollinator habitat conservation efforts. In addition, the label shall contain the following information in English:

1. Name/s of the pesticide(s) used
2. Quantity of pesticide(s) used per 100g
3. Unique traceability code linked to the producer's certification
4. A valid authorisation number
5. Country of origin of the product

[5] For greater certainty, Small Size Farmers are those with small-sized farms that are equivalent to or less than 10 hectares.

Packaging: Covered products shall be placed on the market only in sealed, non-single-use packaging of standard weights: 100g, 200g, 500g, 1kg, 2kg, or 5kg.

IFSA may recognise labeling and packaging measures applied in the country of origin as equivalent, provided such measures achieve an equivalent level of protection and are subject to enforceable commitments, including those established under free trade agreements or other formal cooperation frameworks.

The competent authority shall evaluate such requests in a timely and transparent manner and may consult with relevant international or regional bodies as appropriate.

Nothing in this Article shall prevent the competent authority from requiring supplementary labeling to ensure that consumers are not misled and are adequately informed.

Article 6: Emergency Authorisations

By way of derogation from Article 3, in special circumstances, the Ministry of Agriculture may authorise, for a period not exceeding 120 days, the placing on the market of pesticides, for limited and controlled use, where such a measure appears necessary because of a danger which cannot be contained by any other reasonable means. The said period may be extended, in the public interest. The emergency authorisation shall lapse unless renewed.

The Ministry of Agriculture may ask IFSA for an opinion, or for scientific or technical assistance, and IFSA shall provide such opinion or its results to the Ministry of Agriculture within 1 month of the date of the request.

Appendices to OPPR:

Appendix-I: Pesticides deemed to have been prohibited for the placement in the market of Industria

S. No.	Common name, identification numbers	IUPAC name
1.	Clothianidin CAS No 210880-92-5 CIPAC No 738	(E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine
2.	Thiamethoxam CAS No 153719-23-4 CIPAC No 637	(E,Z)-3-(2-chloro-thiazol-5-ylmethyl)-5-methyl-[1,3,5]oxadiazinan-4-ylidene-N-nitroamine
3.	Imidacloprid CAS No 138261-41-3 CIPAC No 582	(E)-1-(6-Chloro-3-pyridinylmethyl)-N-nitroimidazolidin-2-ylideneamine

Appendix-II: Amended MRLs under OPPR:

Code	Products to which MRLs apply	Pesticide	CODEX MRL value	Updated MRL (applicable from the date of entry into force of OPPR)	MRL value applicable to LDC countries[6]	Previous values (Before the introduction of OPPR)
0820070	Vanilla	Clothianidin, Imidacloprid, Thiamethoxam (Neonicotinoid)	Not Available	0.04	0.1	0.08
		Flupyradifurone	Not Available	0.05	0.2	0.2
0110000	Citron	Clothianidin, Imidacloprid, Thiamethoxam (Neonicotinoid)	1	0.8	1	1
		Flupyradifurone	2	1.5	2	2
0154050	Rose hips[7]	Clothianidin, Imidacloprid,	3	1	1.06	1.04

[6] Marvina is a least developing country which satisfies Article 3(b)(ii) of the OPPR. Marvina also shares a small part of the Avalon rainforest, and an exporter of agricultural products to Industria.

[7] Scientific evidence is not conclusive to demonstrate that neonicotinoid occurs naturally in the concerned agricultural products and to elucidate its mechanism of formation. When re-viewing the MRL, Industria will take into account the information, if it is submitted by 22 February 2030, or, if that information is not submitted by that date, the lack of it.

		Thiamethoxam (Neonicotinoid)				
		Flupyradifurone	3	1	1.5	1.5

Note: MRL values of the insecticides(mg/Kg)

ANNEX-B INSECTICIDES SALES IN INDUSTRIA

i) Clothianidin, Imidacloprid, and Thiamethoxam

Year	Industria Domestic Sales (ton)	Industria Price (USD /ton)	Imports from Aspiria (tons)	Aspiria Price (USD /ton)	Imports from Marvina[8] (tons)	Marvina Price (USD /ton)
2022	800	500	2000	450	300	400
2023	550	510	1600	460	350	410
2024	200	520	1000	475	290	430
Q1 2024	65	525	400	480	80	425
Q2 2024	55	530	300	470	60	430
Q3 2024	50	510	200	460	70	435
Q4 2024	30	505	100	500	80	440
Q1 2025	Prohibition in place					

[8] Marvina is a least developing country which satisfies Article 3(b)(ii) of the OPPR. Marvina also shares a small part of the Avalon rainforest.

ii) Flupyradifurone

Year	Industria (Domestic Sales) (tons)	Industria Price (USD/ton)	Imports from Aspiria (tons)	Aspiria Price (USD/ton)	Imports from Marvina (tons)	Marvina Price (USD/ton)
2022	400	670	300	680	100	710
2023	600	640	450	670	120	705
2024	900	620	600	660	180	700
Q1 2024	200	610	150	665	50	710
Q2 2024	210	620	160	640	55	690
Q3 2024	230	640	140	660	40	720
Q4 2024	260	610	150	675	35	680
Q1 2025	400	650	120	635	30	675
Q2 2025	450	640	100	630	25	670

ANNEX-C INDUSTRIA'S VANILLA MARKET

Year/Quarter	Industria Domestic Sales (tons, USD/ton)	Imports from Aspiria (tons, USD/ton)	Imports from Marvina (tons, USD/ton)	Total Vanilla Market (tons)
2021	3,500 @ $4500/ton	4,000 @ $3800/ton	1,500 @ $6200/ton	9,000
2022	3,600 @ $4400/ton	4,500 @ $3700/ton	1,800 @ $6100/ton	9,900
2023	3,700 @ $4350/ton	5,000 @ $3650/ton	2,200 @ $6000/ton	10,900
2024 Q1	3,750 @ $4300/ton	5,200 @ $3600/ton	2,500 @ $5900/ton	11,450
2024 Q2	3,770 @ $4280/ton	5,100 @ $3550/ton	2,700 @ $5850/ton	11,570
2024 Q3 (Draft MRL Regulation Issued in September 2024)	3,800 @ $4250/ton	4,000 @ $3500/ton	3,200 @ $5800/ton	11,000

2024 Q4	3,850 @ $4200/ton	2,500 @ $3450/ton	3,800 @ $5750/ton	10,150
2025 Q1 (Prohibition of neonicotinoid based pesticides as mentioned in Appendix 1 of OPPR- in Effect from Feb 2025)	3,900 @ $4150/ton	1,000 @ $3400/ton	4,500 @ $5700/ton	9,400
2025 Q2	4,000 @ $4100/ton	600 @ $3350/ton	5,200 @ $5650/ton	9,800

ANNEX-D EXTRACT OF SPECIFIC TRADE CONCERN RAISED BY ASPIRIA AGAINST INDUSTRIA BEFORE THE SPS COMMITTEE

Industria Regulation No. 210/2025 regulating the use of insecticides (ID 845) - Concerns of Aspiria

Aspiria expressed its concern regarding the prohibition on the use of certain neonicotinoids - Clothianidin, Imidacloprid, and Thiamethoxam, and reduction to the level of MRLs for the Clothianidin, Imidacloprid, Thiamethoxam, and Flupyradifurone for agricultural products, including imported products.[9] Aspiria, while acknowledging the importance of protecting pollinators, expressed its concern that the regulation would undermine global safety standards and disregard the agricultural and environmental context of other countries, leading to unnecessary barriers to trade, especially for developing countries exporting to Industria. Aspiria requested Industria to share the risk assessment used as a basis for this decision. Given the widespread use and the large-scale applications of neonicotinoids and other insecticides and fungicides, the proposed measure would severely impact the choice of available pesticides. Aspiria urged Industria to postpone the implementation of the proposed regulation to justify the link between the new MRLs and the objective to be achieved.

Industria acknowledged Aspiria's concerns and explained that it took into consideration environmental aspects when setting MRLs for substances no longer approved in its territory due to global environmental concerns and reviewed active substances on a case-by-case basis. Industria affirmed that, based on current knowledge, reducing the use of neonicotinoids was an effective action to tackle the decline of pollinators. As regards prohibiting the use of certain neonicotinoids, Industria justified their action based on current knowledge and considered their restriction as an effective action to tackle the decline of pollinators.

Industria further pointed out that the comments offered by stakeholders were taken into account. In this regard, stakeholders were invited to provide their comments, and based on requests, the period to comment was extended further. Industria notes that neither the Government of Aspiria nor its stakeholders, including industries, offered their comments. Industria considers its regulation to be in

[9] Notified in document G/SPS/N/IA/976.

compliance with its WTO obligations since there were no equally effective and less trade-restrictive alternatives to protect pollinators. Industria remained available for further discussions.

ANNEX-E EXTRACT OF INDUSTRIA FOOD SAFETY AUTHORITY'S RISK ASSESSMENT RESULTS ON THE SAFETY OF POLLINATORS FROM CERTAIN INSECTICIDES.

The holistic evaluation was conducted over a period of two years, based on a combination of field study, literature review, submission of studies by stakeholders, and public surveys on the application of Clothianidin, Thiamethoxam, Imidacloprid, and Flupyradifurone on agricultural products. Among other aspects, the evaluation report focused on:

(a) the risk to honey bees foraging in nectar or pollen in succeeding agricultural products;

(b) the potential uptake via roots to flowering weeds;

(c) the risk to honey bees foraging on insect honey dew;

(d) the potential guttation exposure and the acute and the long-term risk to colony survival and development, and the risk to bee brood resulting from such exposure;

(e) the potential exposure to dust drift following drill and the acute and the long-term risk to colony survival and development, and the risk to bee brood resulting from such exposure;

(f) the acute and long-term risk to colony survival and development and the risk to bee brood for honeybees from ingestion of contaminated nectar and pollen.

I. Final results of risk evaluation for Neonicotinoids - Clothianidin, Thiamethoxam, and Imidacloprid

The evaluation of the above issues and available information shows high correlation between the application of Neonicotinoids - Clothianidin, Thiamethoxam, and Imidacloprid and pollinator population decline. Results show:

- Clothianidin and Thiamethoxam, with DT90 values exceeding one year in some conditions, showed high persistence and systemicity, contributing to continuous exposure across planting cycles.

- Residue levels of Thiamethoxam and Imidacloprid in nectar and in pollen were found to be at 0.6 µg/kg and 1.5 µg/kg, which were found to be exceeding the levels enough to trigger chronic exposure in pollinators.

- Acute LD50 for honeybees (oral) was observed at <3.8 ng/bee for Clothianidin and <13 ng/bee for Imidacloprid, implying high potency.

- Farmer and consumer surveys across three prominent regions producing vanilla, citron, and rose hips showed that 78% of the total people surveyed considered pollinator decline a critical issue and directly responsible for the decline in production of agricultural products. 68% of the farmers linked reduced pollination rates with vanilla and citron productivity decline. 75% of consumers consider that using insecticides significantly contribute to pollinator population decline.

II. Final results of risk evaluation for Flupyradifurone

The application of Flupyradifurone on agricultural products was examined using the same evaluation methods as for neonicotinoids. Results show a lower correlation between the application and impact on the pollinator population. The results indicate:

- Bee toxicity was significantly lower at acute oral LD50 >1.2 µg/bee.

- Long-term sub-lethal effects remained understudied and inconclusive.

- Existing case studies from other countries, including Aspiria, indicate an average 13% reduction in bee flight activity at sub-lethal field concentrations.

- When Flupyradifurone comes in direct contact with honeybees' bodies at LD50, i.e., lethal dose of 50% (the amount of a substance that kills 50% of a test population), it takes more than 100 micrograms to kill them. If pollinators consume Flupyradifurone, it takes 1.2 micrograms per bee to kill them.

- 42% of consumers consider that using Flupyradifurone contributes to pollinator population decline.

III. Opinions from experts:

Existing research papers and formal opinions sought from experts by IFSA indicate limitations on the existing literature on the study of pollinator decline. The papers and opinions suggest:

- There exist data gaps for certain neonicotinoids, such as Thiacloprid and Acetamiprid, related to sub-lethal effects (that is, negative impact on essential functions like navigation, reproduction, etc.) on bees, and hence, their residue in pollen and nectar cannot be ruled out. In this regard, a few early researchers in Industria and Aspiria found similar data gaps for clothianidin, thiamethoxam, and imidacloprid.

- The threshold set for examining chronic effects on a limited set of pollinators may be inadequately characterised, leading to under protection for specific pollinators while overestimating protection for other pollinators.

- The ARfD (Acute Reference Dose) for Clothianidin, Thiamethoxam, and Imidacloprid, Thiacloprid, Acetamiprid, and Flupyradifurone was as follows:

Pesticides	**ARfD (mg/kg bw)**	**Considered safe?**
Clothianidin	0.1	Close Margin
Thiamethoxam	0.1	Safe
Imidacloprid	0.06	Exceeded in some cases
Thiacloprid	0.01	Exceeded in some cases
Acetamiprid	0.025	Safe
Flupyradifurone	0.1	No risk

IV. Recommendations:

Based on an extensive evaluation and precautionary yet evidence-based regulatory approach, IFSA recommends:

(i) The sale of clothianidin, thiamethoxam, and imidacloprid should be prohibited due to their high toxicity, persistence in the environment, and demonstrated links to pollinator population decline.

(ii) The use of Thiacloprid, Acetamiprid, and Flupyradifurone may be permitted, provided that their application is strictly monitored and supported by additional research to address data gaps, especially concerning sub-lethal and chronic effects.

(iii) MRLs for all the reviewed substances should be revised and tightened, particularly for those compounds where acute reference doses were exceeded or closely approach.